We claim,

1. A compound of Formula 1:

Formula 1

wherein:

 R_1 is selected from cycloalkyl, heterocycloalkyl, aryl and heteroaryl wherein R_1 is optionally substituted with one or more substituents R_a , wherein R_a is independently selected from the group consisting of alkyl, halo, haloalkyl, nitro, alkenyl, alkynyl, alkoxy, $-(R_7)_nNR_8R_9$ (wherein R_7 is selected from alkyl, alkoxy, and oxyalkyl, R_8 and R_9 can be independently selected from H, and alkyl, or R_8 and R_9 can join together such that NR_8R_9 form a 5 or 6-member heterocyclic ring, and n is selected from 0 and 1), and the substituent R_a is optionally further substituted with one or more substituents selected from the group consisting of alkyl, alkoxy, halo, cyano, alkanoyl, haloalkyl, thioalkyl and nitro, $-(R_7)_nNR_8R_9$, wherein R_7 , R_8 , R_9 , and n are as defined above.

R₂ and R₃ are:

independently selected from the group consisting of H, alkyl,
haloalkyl, aralkyl optionally substituted aryl, optionally substituted
heteroaryl and optionally substituted, saturated or unsaturated, 5-or

DOCKET NO. 317743-121

6-membered, homocyclic or heterocyclic rings wherein the optional substituent may be selected from the group consisting of H, alkyl, alkoxy, and halo;

or

b) join together to form a 3, 4, 5, 6 or 7 member spirocyclic ring;

X is slelected from O, S, NH and NCN;

Ar₁ is phenyl and is optionally substituted with one or more substituents R_b, wherein the substituent(s) R_b are independently selected from the group consisting of alkyl, alkoxy, nitro halo, haloalkoxy, -(R₇)_nNR₈R₉, -S(O)₂NR₁₀R₁₁ and -O-(CH₂)_mNR₁₀R₁₁ (wherein R₇ is selected from alkyl, alkoxy, and oxyalkyl, R₈ and R₉ can be independently selected from H, and alkyl, or R₈ and R₉ can join together such that NR₈R₉ form a 5 or 6-member heterocyclic ring, and *n* is selected from 0, 1, 2, 3, 4 and 5 and R₁₀ and R₁₁ are independently selected from H, or alkyl, or R₁₀ and R₁₁ can join together such that NR₁₀R₁₁to form a 5 or 6-member heterocyclic ring and *m* is selected from 1, 2, 3, 4 and 5) and;

the substituent R_b is optionally further substituted with one or more substituents selected from the group consisting of alkyl, alkoxy, halo, cyano, alkanoyl, haloalkyl, thioalkyl, nitro, $-(R_7)_nNR_8R_9$ wherein R_7 , R_8 , R_9 and n are as described above,

with the proviso that Ar₁ does not have a substituent at the 2-position selected from the following groups, nitro, haloalkyl, cyano, -C(O)R₁₂ -C(O)OR₁₂, -C(O)NR₁₂R₁₃, -S(O)R₁₂, -S(O)₂R₁₂, and -S(O)₂NR₁₂R₁₃ (wherein R₁₂ and R₁₃ are independently selected from H and alkyl), and,

the second proviso that Ar_1 does not have an alkanoyl substituent at the 4 position,

and a salt solvate or hydrate thereof.

DOCKET NO. 317743-121

- 2. A compound of claim 1 wherein Ar_1 is substituted with one or more substituents, R_a , wherein the substituent(s) R_a are selected from the group consisting of alkyl, alkoxy, nitro, acetyl, halo, haloalkyl, $-S(O)_2NR_{10}R_{11}$, $-O-(CH_2)_nNR_{10}R_{11}$, wherein R_{10} and R_{11} are independently selected from H, or alkyl, or R_{10} and R_{11} can join together such that $NR_{10}R_{11}$ form a 5 or 6 member heterocyclic ring.
- 3. A compound of claim 2 wherein there are two substituents R_6 , independently selected from the group consisting of nitro, methoxy, and ethoxy.
- 4. A compound of claim 3 wherein the two substituents R_6 are a nitro substituent at the 5-position and a methoxy substituent at the 2-position.
- A compound as defined in claim 1 wherein R₁ is optionally substituted and is selected from the group consisting of phenyl, naphthyl, tetrahydro-naphthyl, indanyl, quinolinyl and pyridyl.
- 6. A compound of claim 5 wherein R₁ is indanyl.
- 7. A compound of claim 5 wherein R_1 is optionally substituted pyridyl wherein the substituent(s) R_a are selected from the group consisting of alkyl, and haloalkyl.
- 8. A compound of claim 5 wherein R₁ is optionally substituted phenyl wherein the substituent(s) R_a are selected from the group consisting of alkyl, halo, haloalkyl, nitro, vinyl, alkoxy, -(R₇)_nNR₈R₉ wherein R₇ is selected from alkyl, alkoxy, and oxyalkyl, R₈ and R₉ can be independently selected from H, and alkyl, or R₈ and R₉ can join together such that NR₈R₉ form a heterocyclic ring, and *n* is selected from 0 and 1.
- A compound of claim 8 wherein R₁ is selected from mono or di-substituted phenyl with the substituents selected independently from the group consisting of alkyl, halo and haloalkyl.
- 10. A compound as defined in claim 1 wherein R₂ and R₃ are independently selected from, H, alkyl, aralkyl, optionally substituted aryl, optionally substituted heteroaryl and optionally substituted saturated or unsaturated 5 or 6-membered homocyclic, or heterocyclic rings.

DOCKET NO. 317743-121

- 11. A compound as defined in claim 10 wherein R₂ and R₃ are selected independently from H, phenyl, 3-thiophene, sec-butyl, 3,4-difluorophenyl, cyclohexyl, 3-trifuoromethylphenyl, t-butyl, isopropyl, methyl, benzyl, trifuoromethyl.
- 12. A compound as defined in claim 10 wherein R_2 and R_3 together form a 3, 5 or 6 member spirocycle.
- 13. A compound of claim 1 selected from the group consisting of:
- 2-[3-(2-methoxy-5-nitro-phenyl)-thioureido]- N-(2-indanyl)-2-(3-thienyl) acetamide **E42.2**;
- 2-[3-(2-methoxy-5-nitro-phenyl)-thioureido]- *N*-(3,4-dimethylphenyl)-2-phenyl acetamide **E32.2**;
- 2-[3-(2-methoxy-5-nitro-phenyl)-ureido]- *N*-(3,4-dimethylphenyl)-2-phenyl acetamide **E32.5**;
- (R)-2-[3-(2-methoxy-5-nitro-phenyl)-thioureido]- *N*-(3,4-dimethylphenyl)-2-phenyl acetamide **E33.1***;
- 2-[3-(2-methoxy-5-nitro-phenyl)-ureido]- *N*-(2-indanyl)-2-(3-thienyl) acetamide **E42.1**;
- (R)-2-[3-(2-nitro -5-methoxy-phenyl)-ureido]- *N*-(2-indanyl)-2-phenyl acetamide **E29.1***;
- (R)-2-[3-(2-nitro-5-methoxy-phenyl)-ureido]- *N*-(4-chlorophenyl)-2-phenyl acetamide **E4.1**; and
- (R)-2-[3-(2-methoxy-5-nitro-phenyl)-ureido]- *N*-(3-trifluromethylphenyl)-2-phenyl acetamide **E31.2.**
- 14. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.
- 15. A method for treating a patient having a medical condition for which a glycine transport inhibitor is indicated, comprising the step of administering to a patient a pharmaceutical composition as described in claim 14.
- 16. A method according to claim 15 wherein the medical condition is schizophrenia, cognitive dysfunction, or Alzheimer's disease.